

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

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MYCLERK, LLC,  
Plaintiff,

v.

ZEBRA TECHNOLOGIES CORPORATION.,  
Defendant.

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)  
) Civil Action No. 6:21-cv-00536  
)  
) **JURY TRIAL DEMANDED**  
)  
)

**COMPLAINT**

Plaintiff MyClerk, LLC (“Plaintiff”) hereby brings this Complaint seeking damages and other relief for patent infringement, and, demanding trial by jury, and alleges as follows:

**PARTIES**

1. Plaintiff MyClerk, LLC is a limited liability company organized under the laws of Texas having offices at 17330 Preston Road, Suite 200, Dallas, Texas 75252. Plaintiff is the owner of the entire right, title, and interest in U.S. Patent 10,133,888 covering technologies related to new and improved systems and methods for radio RFID tags, radio IC tags, and related positioning systems.

2. Upon information and belief, Defendant Zebra Technologies Corporation is a company organized and existing under the laws of the State of Delaware with its principal place of business at 3 Overlook Point, Lincolnshire, Illinois 60069 and additional places of business in Texas and in this judicial district, and with its agent for service The Corporation Trust Company at Corporation Trust Center, 1209 Orange St, Wilmington, De, 19801.

3. Defendant is a developer of RFID solutions, including hardware and software products that wirelessly connect various items to the internet. Defendant sells the Zebra Advanced Asset Tracking System, which uses ATR7000 readers and Real Time Location System (RTLS) software which includes configuration, management, and location analytics components for calculating location of tagged assets. Its products can be purchased online and through its throughout the United States and in this district as shown at <https://www.zebra.com/us/en/partners-/partner-application-locator.html>. **Exhibit B** (finding a partner), **Exhibit C** (partner locator).

### **JURISDICTION AND VENUE**

4. This action arises under the patent laws of the United States, Title 35 of the United States Code, 35 U.S.C. § 271 et seq. The Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331 and 1338(a).

5. The Court has general and specific personal jurisdiction over Defendant because it is located in the State of Texas and in this judicial district, and it conducts substantial business in this forum, directly and/or through agents and intermediaries, including: (i) at least a portion of the infringing activity alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to persons in this District, and (iii) having a regular and established place of business in this state and in this judicial district by its physical presence in this district and by virtue of its control over its agents.

6. Plaintiff's cause of action arises, at least in part, from Defendant's presence in, and contacts with, and activities in this District and the State of Texas.

7. Upon information and belief, Defendant, directly and/or through agents and intermediaries, imports, makes, uses, sells, offers for sale, ships, distributes, advertises, promotes,

and/or otherwise commercializes infringing products in this District and the State of Texas. Upon information and belief, Defendant regularly conducts and solicits business in, engages in other persistent courses of conduct in, and/or derives substantial revenue from goods and services provided to residents of this District and the State of Texas. **Exhibit B** (finding a partner), **Exhibit C** (becoming a partner). Defendant further manufactures products and has employees in Texas and in this judicial district. **Exhibit D** (Austin employment).

8. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400(b). Defendant is a company residing in this state and in this judicial district, including for example at 507 W Howard Ln Suite 100, Austin, TX 78753, at 8601 Ranch Rd 2222, Austin, TX 78730, and at 14000 Summit Dr # 900, Austin, TX 78728. Defendant has committed substantial acts of infringement in this District. **Exhibit C** (partner locator), and has further places of business in this judicial district, through its 2018 acquisition of Xplore Technologies Corp. **Exhibit E** (Xplore acquisition). Upon information and belief, Zebra conducts business under the name Xplore Technologies Corporation at this address, with a website <http://www.xploretech.com/> redirecting <https://www.zebra.com/us/en/products/tablets.html>.

### **COUNT I – INFRINGEMENT OF THE '888 PATENT**

9. Plaintiff incorporates by reference the allegations in all preceding paragraphs as if fully set forth herein.

10. U.S. Patent No. 10,133,888 (“the ’888 Patent”) is entitled “DATA READER AND POSITIONING SYSTEM” and was issued on Nov. 20, 2019. A true and correct copy of the ’888 Patent is attached as **Exhibit A** (’888 Patent).

11. The ’888 Patent was filed on Sep. 28, 2006 as U.S. Patent Application No. 11/536,019.

12. Plaintiff is the owner of all rights, title, and interest in and to the '888 Patent, with the full and exclusive right to bring suit to enforce the '888 Patent, including the right to recover for past infringement.

13. The '888 Patent is valid and enforceable under United States Patent Laws.

Technical Description

14. The technology of the '888 Patent relates to radio RFID tags, radio IC tags, and related positioning systems.

15. The '888 Patent recognized several problems with certain conventional technologies, including interference due to phase inversion between direct and reflected radio waves in the read environment. “In a point where the interference occurs, a radio IC tag cannot receive radio waves for a read from a reader. As a result, a data read from the radio IC tag fails.”

**Exhibit A** at 1:39 – 42.

16. Another problem identified by the '888 Patent is that “when a plurality of readers and a plurality of antennas for readers are provided, the radio waves for a read radiated from each antenna interfere with one another, and in a point where the above-mentioned interference occurs, a data read from a radio IC tag fails.” *Id.* at 1:43 – 47.

17. The '888 Patent teaches solutions to these problems and provides “a data reader capable of changing an occurrence position of a dead spot (null point) as a point/area where it is difficult or impossible to read data due to the interference of radio waves for a read radiated from a data reader, and reading data regardless of a position of a radio IC tag.” *Id.* at 1:48 – 53.

18. To achieve its solution, the '888 Patent teaches use of “a data reader for reading data in a separate position from a storage medium (for example, a radio IC tag) provided with a

storage unit for storing data and a communicating antenna for transmitting data stored in the storage unit.” *Id.* at 1:60 – 64.

19. The ’888 Patent further teaches that “the data reader includes a plurality of antenna units for transmitting and receiving data with a storage medium; and a control unit (for example, a reader/writer or a reader/writer control device) connected to each antenna unit, wherein each antenna unit can change radiation characteristics (for example, an electric field pattern, a beam direction, a beam width, etc.) in accordance with the control unit.” *Id.* at 1:65 – 2:4.

20. The ’888 Patent further teaches that “an occurrence of a dead spot due to a direct wave, reflected wave, etc. can be avoided by changing the radiation characteristic of antenna means, or a read disabled status due to a dead spot can be avoided by changing an occurrence position regardless of location of a storage medium, thereby performing a data read without failing in reading any data.” *Id.* at 2:5 – 12.

21. The ’888 Patent further teaches that interference can be avoided when “the control unit changes the directivity of each antenna unit in conjunction with the directivities of other antenna units.” *Id.* at 2:14 – 16; 2:17 – 22.

22. The ’888 Patent further teaches that interference can also be avoided if “the control unit changes the direction of the radio waves radiated from the antenna units by sequentially driving the plurality of the antenna units.” *Id.* at 2:24 – 26; 2:27 – 33.

23. The ’888 Patent further teaches that interference can also be avoided by configuring “the control unit [such that] the beam direction of each of the simultaneously driven antenna units is different from the direction of other antenna units.” *Id.* at 2:35 – 39; 2:40 – 46.

24. The ’888 Patent further teaches the technical solution of “a data reader for reading data in a separate position from storage mediums (for example, a radio IC tags) each having a

storage unit for storing data and a communicating antenna for transmitting data stored in the storage unit.” *Id.* at 2:48 – 51. The data reader utilizes a “includes a phase adjustment means (for example, phase adjustment circuit) for changing the phase of the carrier wave.” *Id.* at 2:59 – 61.

25. This solution avoids interference because “an occurrence position of a dead spot can be changed by changing the phase of a carrier wave.” *Id.* at 2:62 – 62. “As a result, although there is a radio IC tag temporarily located in a dead spot, the dead spot can be removed after the change of the phase, thereby avoiding a read disabled status, and performing a data read without failing in reading any data.” *Id.* at 2:63 – 67.

26. The ’888 Patent further teaches a number of additional technical solutions to the forementioned problems. *Id.* at 3:1 – 5:17.

27. The novel technical solutions taught by the ’888 Patent were not well-understood, routine, or conventional at the time of the inventions of the ’888 Patent.

#### Direct Infringement

28. On information and belief, Defendant, without authorization or license from Plaintiff, has been and is presently directly infringing the ’888 Patent, either literally or equivalently, as infringement is defined by 35 U.S.C. § 271(a), including through making, using, (including for testing purposes), selling and offering for sale methods and systems infringing one or more claims of the ’888 Patent. Defendant is thus liable for direct infringement pursuant to 35 U.S.C. § 271(a). Exemplary infringing instrumentalities include the Zebra Advanced Asset Tracking System, and all other substantially similar products.

29. Claim 10 of the ’888 Patent recites:

10. A positioning system, comprising:

- (a) a plurality of antenna units mounted in different places to read data from storage mediums each having a storage unit for storing data and a communicating antenna for transmission of the data stored in the storage unit;
- (b) a control unit connected to each antenna unit, for controlling each antenna unit to sequentially change radiation characteristics of each antenna unit;
- (c) an antenna switch unit for selectively driving the antenna units in accordance with a control instruction from the control unit to transmit the radio wave having desired polarization directions according to each antenna unit by switching the antenna units; and
- (d) a positioning unit for calculating the position of each storage medium by using the number of succeeded read operations which is obtained by having each antenna unit read the storage mediums, while having each antenna unit sequentially change its radiation characteristics.

30. Defendant infringes exemplary claim 10, as a non-limiting example only, by its Zebra Advanced Asset Tracking System (“ZAATS”):

10. The ZAATS comprises a positioning system, that uses, for example, ATR7000 readers and Real Time Location System (RTLS) software which includes configuration, management, and location analytics components for calculating the location of tagged assets.

Zebra’s Advanced Asset Tracking System (ZAATS) provides continuous identification, location, and tracking of items tagged with passive UHF RFID tags conforming to the GS1 EPC™ Radio Frequency Identity Protocols Generation-2 UHF RFID Specification for RFID Air Interface standard. ZAATS is designed to enhance the efficiency and work-flows of Zebra’s customers’ operations, which are increasingly focused on cohesive, real-time data.

ZAATS consists of two primary components: the Real-Time Location System (RTLS) Services software, which contains the configuration, management, and location analytics components; and the ATR7000 overhead array readers.

**Exhibit F** (ZAATS Deployment Guide).



## ATR7000 RTLS Reader

### **SUPERIOR LOCATIONING FOR MAXIMUM ASSET VISIBILITY**

The ATR7000 is a new class of RFID reader offering advanced Zebra-only technology that provides visibility into the pinpoint location of all of your tagged assets. Now, you can see where your inventory, forklifts, equipment, workers and more are located — and if they are on the move, in which direction they are moving. The result? Streamlined operations, reduced costs and better customer service.

**Exhibit G** (<https://www.zebra.com/us/en/products/rfid/rfid-readers/atr7000.html>).

- (a) The ZAATS comprises a plurality of antenna units mounted in different places to read data from storage mediums each having a storage unit for storing data and a communicating antenna for transmission of the data stored in the storage unit. The ZAATS includes multiple ATR7000 overhead readers mounted at different places for reading data from RFID tags attached to assets. Each ATR7000 reader has a phased array antenna which includes 291 small antenna beams.

**Figure 7** Warehouse Deployment Scenario with Pallet Racks



**Exhibit F** (ZAATS Deployment Guide) at 24.



The ATR7000 Advanced Array Readers are EPC Gen2 readers with an integral phased array antenna capable of steering beams and estimating the bearing (angle of arrival) of EPC Gen2 tags. This product in the RFID portfolio is based on a Zebra proprietary advanced array architecture that provides unprecedented location accuracy and real time tracking of RFID tags.

*Id.*

RTLS Services (CLAS) serves as a data aggregator that executes location analytics to estimate the tag location and reports out unique tag ID, location, and time-stamp in real-time.

*Id.* at 11.

- (b) The ZAATS comprises a control unit connected to each antenna unit, for controlling each antenna unit to sequentially change radiation characteristics of each antenna unit. Each ATR7000 reader has a CPU (“a control unit”) which can control, and steer 291 antenna beams. With ATR7000 readers operating in real time location system (RTLS) mode, the antenna beams are fired in a pre-defined scan sequence. Further, using PowerSession software, an instruction can be given to each ATR7000 reader of the system to change its antennas’ beam output power while firing them in pre-defined sequence and polarization.

This section describes aspects of PowerSession that are only applicable when using the ATR7000. The most notable difference when using PowerSession with an ATR7000 is that for a standard fixed reader an antenna is associated with a physical port (i.e. antenna connector, cable, and antenna), whereas, for the ATR7000 with its integral beam steered antenna array, an antenna is “virtual” in the sense that an antenna is defined as a beam with a specific polarization steered in a specific direction. The ATR7000 supports a total of 291 beams, 97 directions with three distinct polarizations.

**Exhibit H** (RFID DEMO Applications User Guide) at 68, 69.

The Settings tab, shown in [Figure 61](#), is used to configure the reader to transmit pre-defined beams either singly or in a pre-determined scan sequence. There is also a setting for Antenna Power, which can be varied between 16 dBm EIRP up to a maximum of 36 dBm EIRP.

*Id.*

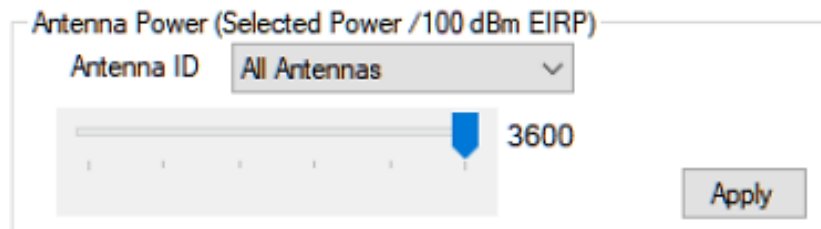
- **Antenna Sequence** - allows selection of antenna sequence on the ATR7000.
  - Specify a comma separated list of antennas (1,5,8,9..).
  - Specify a list (1-16).
- **Default** - allows the selection of antennas that are used in the ATR7000 in RTLS mode. When an antenna sequence is selected, it defaults to the beams used in RTLS mode. If the user has changed the antennas that are part of the antenna sequence, the **Default** button provides a shortcut to modify the antenna sequence to the RTLS mode.

*Id.*

### Antenna Power

- **Antenna ID** - select whether to apply the antenna power setting to all antennas or a specified antenna.
- **Antenna power slide bar** - adjust the reader-supported antenna power values.
- **Select Apply.**

*Id.* at 63, 68.



*Id.*

- (c) The ZAATS comprises an antenna switch unit for selectively driving the antenna units in accordance with a control instruction from the control unit to transmit the radio wave having desired polarization directions according to each antenna unit by switching the antenna units. PowerSession is a windows-based software for ATR7000 reader, and can be used to provide instructions to the reader's CPU which can control an antenna switch unit to enable/disable selected antenna beams having desired polarization (such as theta, phi, or left-hand circular polarization).

### Beam steering for pinpoint location accuracy

The ATR7000 electronically steers and processes several hundreds of narrow flashlight-style beams simultaneously, providing highly-accurate pinpoint asset location typically better than 2 ft/0.6 meters.

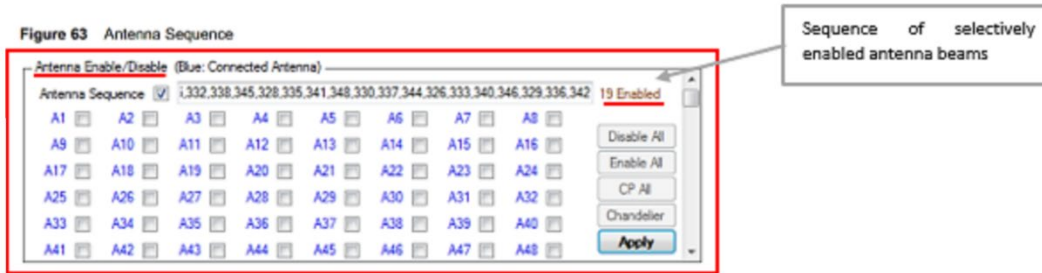
**Exhibit G** (<https://www.zebra.com/us/en/products/rfid/rfid-readers/atr7000.html>).

### Antenna Stop Trigger Setting

Specify how long an inventory should be performed on a particular antenna port before it stops and switches to the next available antenna port.

### Utilizing PowerSession with ATR7000

This section describes aspects of PowerSession that are only applicable when using the ATR7000. The most notable difference when using PowerSession with an ATR7000 is that for a standard fixed reader an antenna is associated with a physical port (i.e. antenna connector, cable, and antenna), whereas, for the ATR7000 with its integral beam steered antenna array, an antenna is "virtual" in the sense that an antenna is defined as a beam with a specific polarization steered in a specific direction. The ATR7000 supports a total of 291 beams, 97 directions with three distinct polarizations.



**Exhibit H** (RFID DEMO Applications User Guide) at 62, 66, and 69.

- (d) The ZAATS comprises a positioning unit for calculating the position of each storage medium by using the number of succeeded read operations which is obtained by having each antenna unit read the storage mediums, while having each antenna unit sequentially change its radiation characteristics. The location analytics component of the real time location system (RTLS) software installed in each ATR7000 reader measures bearing (angle of arrival) of a tagged asset using the antenna beams which are fired in pre-defined sequence while their transmit power or polarization ("radiation characteristics") is changed.

### Location Analytics (LA)

Figure 1 also illustrates that Location Analytics (LA) is the primary component within RTLS Services responsible for aggregating bearing information received from the ATR7000 overhead readers, estimating x-y-z tag location, determining if a tag is moving (dynamic) or not moving (static), applying additional advanced algorithms that enhance static and dynamic location (tracking) accuracy, and reporting a final tag location estimate with metadata (EPC, timestamp, etc.) to a location data endpoint. LA also has the capability of combining raw bearing and location estimates from multiple RFID tags affixed to the same asset (for example, forklifts) to improve overall location accuracy and/or provide orientation and directionality information. The figure illustrates three AARs for simplicity, although, operation is designed to scale up to the maximum of 1000 readers per site. While LA is considered a components of RTLS Services, it is deployed by CNM to the readers at system start.

**Exhibit F** (ZAATS Deployment Guide) at 12.

### **RTLS Services**

RTLS Services (CLAS) serves as a data aggregator that executes location analytics to estimate the tag location and reports out unique tag ID, location, and time-stamp in real-time.

RTLS Services performs the following primary functions:

- Discovers readers on a local network.
- Configures each reader to read tags and report the estimated bearings.
- Estimates the tag location based on the bearings reported by the reader.

**Exhibit H** (RFID DEMO Applications User Guide) at 68.

31. The foregoing structure, function, and operation of the exemplary Accused Instrumentality meets all limitations of at least exemplary claim 1 of the '888 Patent.

32. Defendant's acts of making, using, selling, offering for sale and/or importing the Accused Instrumentalities are without Plaintiff's license or authorization.

33. Defendant's unauthorized actions therefore constitute direct infringement of Plaintiff's exclusive rights pursuant to 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, and Plaintiff is entitled to recover from Defendant the damages sustained as a result of Defendant's infringement of the '888 Patent in an amount to be determined at trial, which amount shall be no less than a reasonable royalty, together with interest and costs as fixed by this Court pursuant to 35 U.S.C. § 284.

34. Defendant's infringement of the '888 Patent has injured Plaintiff and Plaintiff is entitled to recover damages from Defendant.

### **Willful Infringement**

35. Defendant has had actual knowledge of the '888 Patent at least as of service of this Complaint.

36. Notwithstanding this knowledge, Defendant has knowingly or with reckless disregard willfully infringed the '888 Patent. Defendant has thus had actual notice of infringement of the '888 Patent and acted despite an objectively high likelihood that its actions constituted infringement of Plaintiff's valid patent rights, either literally or equivalently.

37. This objective risk was either known or so obvious that it should have been known to Defendant. Accordingly, Plaintiff seeks enhanced damages pursuant to 35 U.S.C. §§ 284 and 285.

#### Indirect Infringement

38. At least as early as the service of this Complaint, Defendant indirectly infringes the '888 Patent within the United States by inducement under 35 U.S.C. §271(b). By failing to cease making, using, selling, importing, or offering for sale the Accused Instrumentalities at least as of the service of this Complaint, Defendant has knowingly and intentionally induced users of the Accused Instrumentalities to directly infringe one or more claims of the '888 Patent, including, by: (1) providing instructions or information, for example on its publicly available website, to explain how to use the Accused Instrumentalities, including the use of the Accused Instrumentalities in manners described above, which are expressly incorporated herein; and (2) touting these uses of the Accused Instrumentalities in advertisements, including but not limited to, those on its website. Use of the Accused Instrumentalities in the manner intended and/or instructed by Defendant necessarily infringes the '888 Patent.

39. At least as of the service of this Complaint, Defendant also indirectly infringes the '888 Patent within the United States by contributory infringement under 35 U.S.C. §271(c). Defendant is aware, at least as of the service of this Complaint, that components of the Accused Instrumentalities are a material and substantial part of the inventions claimed by the '888 Patent, and are designed for a use that is both patented and infringing, and have no substantial non-infringing uses. By failing to cease making, using, selling, importing, or offering for sale the Accused Instrumentalities (and components thereof) at least as of the service of this Complaint, Defendant has knowingly and intentionally contributed to direct infringement by its customers of

one or more claims of the '888 Patent, including, by: (1) providing instructions or information, for example on its publicly available website, to explain how to use the Accused Instrumentalities, including the use of the Accused Instrumentalities in manners described above, which are expressly incorporated herein; and (2) touting these uses of the Accused Instrumentalities in advertisements, including but not limited to, those on its website. Use of the Accused Instrumentalities in the manner intended by Defendant necessarily infringes the '888 Patent.

40. As a result of Defendant's infringement, Plaintiff has suffered monetary damages, and is entitled to an award of damages adequate to compensate it for such infringement which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

#### **JURY DEMAND**

Plaintiff hereby demands a trial by jury on all issues so triable.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff requests that this Court enter judgment against Defendant and any other entity by and through which Defendant make, sell, use, offer for sale or import, or have made, sold, used, offered for sale or imported infringing Accused Instrumentalities as follows:

- A. Adjudicating, declaring, and entering judgment that Defendant has directly infringed U.S. Patent No. 10,133,888 either literally or under the doctrine of equivalents;
- B. Adjudicating, declaring, and entering judgment that Defendant has induced infringement and continues to induce infringement of one or more claims of U.S. Patent No. 10,133,888;

- C. Adjudicating, declaring, and entering judgment that Defendant has contributed to and continue to contribute to infringement of one or more claims of U.S. Patent No. 10,133,888;
- D. Awarding damages to be paid by Defendant adequate to compensate Plaintiff for Defendant's past infringement of U.S. Patent No. 10,133,888 and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- E. Awarding Plaintiff pre-judgment and post-judgment interest; and
- F. Awarding Plaintiff such other and further relief at law or in equity as this Court deems just and proper.

Respectfully submitted,

Date: May 27, 2021

\s\ Henning Schmidt

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